

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS:	Uresh K. Vahalia and Percy Tzelnic	GROUP ART UNIT:	Not Yet Assigned
U.S.S.N.:	Not Yet Assigned (claiming priority to s/n 09/261,621 filed on March 3, 1999)	EXAMINER:	Not Yet Assigned
FILING DATE:	Herewith		
TITLE:	<i>FILE SERVER SYSTEM PROVIDING DIRECT DATA SHARING BETWEEN CLIENTS WITH A SERVER ACTING AS AN ARBITRATOR AND COORDINATOR</i>		

Box Patent Application
Assistant Commissioner for Patents
Washington, DC 20231

PRELIMINARY AMENDMENT UNDER 37 C.F.R. 1.53(b)

Sir:

This is a Preliminary Amendment in connection with a Continuation under 37 CFR 1.53(b) of parent application Serial No. 09/261,621 filed March 3, 1999. A Non-Publication Request, Power of Attorney, and New Claims added by this Preliminary Amendment accompany this Preliminary Amendment.

In the event, the Assistant Commissioner believes an additional fee is due, the authority is hereby granted to charge Deposit Account No. 05-0889. I certify the enclosed copy is a true copy of the parent application and this Continuation under 37 CFR 1.53(b) now claims the benefit of priority under 35 USC 120 of US Application Serial No. 09/261,621 filed March 3, 1999.

Please cancel claims 1-49 and add new claims 50-66 to the subject Continuation

Application, as follows:

In the Claims:

50. (New) A method of accessing data in a data stored in a data storage location, the method comprising:

- (a) a server receiving from a client a request for accessing data related to a file;
- (b) in response to the request for data, the server returning to the client metadata of the file including information specifying a data storage location for the file; and
- (c) using the metadata of the file, the client producing at least one data access command for accessing the data storage location.

51. (New) The method of claim 50, further comprising granting to the client a lock on at least a portion of the file.

52. (New) The method as claimed in claim 51, wherein a plurality of clients share read-write access to the file, and the server grants respective read locks and write locks to the clients.

53. (New) The method as claimed in claim 50, wherein the client writes data to the data storage location, modifies the metadata from server in accordance with the data storage location to which the data is written, and sends the modified metadata to the server.

54. (New) The method as claimed in claim 53, wherein the client sends the modified metadata to the server after the client writes the data to the data storage location.

55. (New) The method as claimed in claim 50, wherein the client has a lock manager that responds to a request from an application process of the client for access to the file by granting to the application process a local file lock on at least a portion of the file, and then sending to the server the request for access to the file.

56. (New) The method as claimed in claim 55, wherein the method includes dynamically linking application programs of the client with input-output related operating system routines of the client, the input-output related operating system routines intercepting file access calls from client application processes to send file access requests to the server to obtain from the server locks upon at least a portion of each of the files, to obtain metadata for producing data access commands for accessing data storage locations, to produce the data access commands from the metadata, and to send the data access commands to the server in order to access the data storage locations.

57. (New) The method as claimed in claim 56, wherein the data access command is a write command for a write operation upon at least a portion of the file, and wherein the method includes the client writing the data to the data storage locations, modifying the metadata from the server in accordance with the write operation upon at least a portion of the file, and sending the modified metadata to the server.

58. (New) The method as claimed in claim 57, wherein the client sends the modified metadata to the server after the client writes the data to the data storage location.

59. (New) The method as claimed in claim 58, wherein the client performs asynchronous write operations upon the data storage locations, and wherein the client sends the modified metadata to the server in response to a commit request from an application process of the client.

60. (New) The method as claimed in claim 59, wherein the client performs asynchronous write operations upon the data storage locations, and wherein the client sends the modified metadata to the server when the client requests the server to close the file.

61. (New) A program product containing a program for a server and a client, wherein the server and the client are in communication with at least one data storage device for storing a file system, wherein the program is executable for responding to each request for data related to a file stored in the at least one data storage device by:

enabling the server to respond to a request for data from a client for access to data related to a file, by returning to the client metadata of the file including information specifying a data storage location for the file; and

enabling the client to use the metadata of the file to produce at least one data access command for accessing the data storage location.

62. (New) The program product of claim 61, wherein the program is executable for responding to each request for data related to a file stored in the at least one data storage device by granting to the client a lock on at least a portion of the file.

63. (New) The program product as claimed in claim 62, wherein a plurality of clients share read-write access to the file, and the server grants respective read locks and write locks to the clients.

64. (New) The program product as claimed in claim 61, wherein the client writes data to the data storage location, modifies the metadata from the server in accordance with the data storage location to which the data is written, and sends the modified metadata to the server.

65. (New) The program product as claimed in claim 64, wherein the client sends the modified metadata to the server after the client writes the data to the data storage location.

66. (New) The program product as claimed in claim 61, wherein the client has a lock manager that responds to a request from an application process of the client for access to the file by granting to the application process a local file lock on at least a portion of the file, and then sending to the server the request for access to the file.

Atty. Docket No.: EMC-98-092CON(1)
U.S.S.N. To Be Assigned
Filing Date: Herewith
Applicant: Vahalia *et al.*

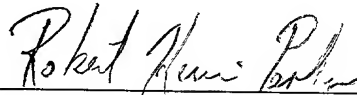
REMARKS

This is a Continuation Application under 37 CFR 1.53(b) of parent application Serial No. 09/261,621 filed March 3, 1999 and is accordingly entitled to priority under 35 USC 120. The disclosure of the prior application is considered part of (and is incorporated by reference) the disclosure of this Continuation Application

These new claims are believed to be in condition for allowance. Notice thereof is respectfully requested.

Respectfully submitted,

Dated: Dec. 21, 2001



Robert Kevin Perkins (Reg. No. 36,634)
Attorney for Applicant
EMC Corporation
35 Parkwood Drive
Hopkinton, MA 01748-9103
508.435.1000, ext. 76985
508.293.7189 Facsimile

G/Linda/Kevinp/prelim amendmentEMC-98-092CON Amendment.doc